

### REMARKS

This Response serves as the submission accompanying Applicants' Request for Continued Examination (RCE) filed pursuant to 37 C.F.R. §1.114. By final Office Action mailed November 17, 2005, pending claims 1-11 stand rejected, reconsideration of which is respectfully requested in view of the above amendments and following remarks. Claim 1 has been amended. Claims 1-11 are now pending.

#### Examiner Interview

As an initial matter, Applicants wish to thank the Examiner for the teleconference with Applicants' representatives on March 8, 2005. As agreed during such teleconference, Applicants are filing the present RCE and Amendment to (a) amend claim 1 to further clarify the type of carbon substrate utilized, and (b) provide additional arguments traversing the Examiner's rejection of the pending claims under 35 U.S.C. §103(a). It is Applicants' understanding that the Examiner has indicated that the present amendment to claim 1 will be sufficient to overcome the outstanding rejection, and that, upon receipt of this Amendment, the Examiner will contact Applicants' representative, if necessary, to further discuss these matters.

#### Claim Amendments

By way of this Amendment, Applicants have amended claim 1 to specify that "the carbon substrate is dark in color" (emphasis added). Support for this amendment may be found in the specification at, for example, page 4, lines 19-25, and page 6, lines 11-20, which passages note that representative carbon substrates include carbon fiber paper sold by Toray under the trade name TGP-H-60, carbon cloth available from Ballard Material Products under the trade name AvCarb™) and black substrates, all of which are dark in color. Furthermore, as noted in the passage on page 6, lines 11-20, and as further discussed below, the claimed invention is based upon the surprising discovery that the amount of light transmitted through a carbon substrate that is dark in color is indicative of the degree of loading of a waterproofing agent therein. While the specification does not specifically contain the terminology "dark in color," Applicants submit that the foregoing passages would clearly demonstrate to one skilled in the art

that Applicants had possession of the claimed invention. Accordingly, Applicants submit that no new matter has been added by way of this amendment.

Rejections Under 35 U.S.C. §103(a)

Claim 1

Claim 1 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Kustermann (U.S. Patent No. 6,248,174) in view of Seymour (U.S. Patent No. 5,110,213) for the reasons set forth in the Office Action. Applicants respectfully disagree.

As described in the specification at, for example, page 6, lines 11-20, it has been surprisingly discovered that the amount of light transmitted through a carbon substrate that is dark in color is indicative of the degree of loading of a waterproofing agent therein. Since the carbon substrate is dark in color, one would expect transmission to be a poor means of measurement. However, it has been discovered that a sufficient level of transmission through such dark carbon substrates does occur by multiple reflections and/or scattering. To further clarify this aspect of the claimed invention, and as set forth above, Applicants have amended claim 1 to specify that the carbon substrate is dark in color.

With respect to the references cited by the Examiner, Applicants submit that Kustermann and Seymour, taken together, would not lead one of ordinary skill in the art to modify the methods disclosed therein to yield a method for determining the degree of loading of a waterproofing agent within a carbon substrate that is dark in color, as recited in pending independent claim 1. In this regard, Applicants agree with the Examiner's conclusion that Kustermann contains no teaching or suggestion that the method disclosed therein may be applied to determine the degree of loading within a material web, such as a carbon substrate. Furthermore, Applicants note that Kustermann contains no teaching or suggestion that the method disclosed therein may be applied to substrates which are dark in color.

Contrary to the Examiner's assertion, however, Applicants do not believe that Seymour cures these deficiencies. In this regard, Applicants note that Seymour is directed to a different type of method, namely, a method for measuring the concentration of material in a sample by optically sensing a two-dimensional portion of the sample and converting the sensed

portion into a two-dimensional array of points, each having a digital value related to the sensed optical intensity at the point that correlates with the concentration of the material in the sample. In addition, Applicants note that the only method specifically exemplified in Seymour (*see* Figure 1 of Seymour) is based upon reflectance measurements, not transmission measurements. Furthermore, Seymour contains no teaching or suggestion regarding the applicability of a transmission-based measurement method to substrates which are dark in color. Accordingly, Applicants submit that Seymour would not motivate one of ordinary skill in the art to apply the method of Kustermann, which is based upon the transmission of light, to determine the degree of loading within a substrate which is dark in color. To the contrary, it is arguable that Seymour actually teaches away from such a modification by only exemplifying a reflectance-based detection method.

In view of the foregoing, Applicants submit that the cited references fail to establish a *prima facie* case of obviousness against pending claim 1, as amended, and request that this ground of rejection be withdrawn.

#### Claims 2-11

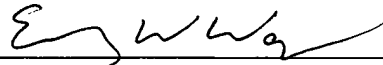
Claims 2-11 stand rejected as being unpatentable over one or more of Kustermann, Seymour, the "Background of the Invention" section of the present application, Bonsel et al. (U.S. Patent No. 6,197,147) and Bauer (U.S. Patent No. 4,737,651) as set forth in the Office Action. As noted, these rejections are based upon the Examiner's conclusion that the method of claim 1 is unpatentable over Kustermann in view of Seymour. However, as set forth above, Applicants submit that claim 1 is patentable over Kustermann and Seymour. Since claims 2-11 all depend directly or indirectly from claim 1, they are patentable for the same reasons. Accordingly, Applicants respectfully request that these rejections also be withdrawn.

In view of the above amendments and remarks, allowance of claims 1-11 is respectfully requested. A good faith effort has been made to place this application in condition for allowance. However, should any further issue require attention prior to allowance, the Examiner is requested to contact the undersigned at (206) 622-4900 to resolve the same. Furthermore, the Commissioner is authorized to charge any additional fees due by way of this Amendment, or credit any overpayment, to our Deposit Account No. 19-1090.

Respectfully submitted,

Hong Cao et al.

SEED Intellectual Property Law Group PLLC



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Emily W. Wagner

Registration No. 50,922

Enclosure:

Postcard

701 Fifth Avenue, Suite 6300  
Seattle, Washington 98104-7092  
Phone: (206) 622-4900  
Fax: (206) 682-6031

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